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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/077,029	05/18/1998	MUTSUMI KIMURA	JAO40499	5555
25944	7590	06/26/2008		
OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850			EXAMINER LIN, JAMES	
			ART UNIT 1792	PAPER NUMBER
			MAIL DATE 06/26/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/077,029	Applicant(s) KIMURA ET AL.	
	Examiner Jimmy Lin	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 101-105, 107-112, 116-120 and 123 is/are pending in the application.
- 4a) Of the above claim(s) 116-120 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 101-105, 107-112 and 123 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/30/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. This application contains claims 112-120 drawn to an invention nonelected with traverse in the reply filed on 8/2/2006. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Specification

2. The substitute specification filed 4/23/2008 is entered.

Claim Interpretations

3. The term “surround” has been given its ordinary meaning, which is to form an enclosure round or to encircle.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 101-104 and 123 are rejected under 35 U.S.C. 103(a) as being obvious over Roitman (U.S. Patent 5,972,419) in view of Ra et al. (U.S. Patent No. 5,874,200).

The grounds of rejection are stated in the Office Action filed 7/30/2007.

6. Claims 105 and 107-111 are rejected under 35 U.S.C. 103(a) as being obvious over Roitman ‘419 in view of Kaneko (JP 07-153574, as provided by Applicant) and Ohno et al. (U.S. Patent No. 5,705,302).

The grounds of rejection are stated in the Office Action filed 7/30/2007.

7. Claim 112 is rejected under 35 U.S.C. 103(a) as being obvious over Roitman '419 in view of Kaneko '574 and Ohno '302 as discussed above for claim 110, and further in view of Ra '200.

The grounds of rejection are stated in the Office Action filed 7/30/2007.

Response to Arguments

8. Applicant's arguments filed 10/30/2007 have been fully considered but they are not persuasive.

Applicant argues on pg. 10 that Roitman and Ra do not qualify as prior art because they were filed after the Japanese priority date of the present specification. However, the foreign priority document does not fully support the claims. For example:

Claims 101-104: The foreign priority document does provide a general teaching of enhancing a liquid repellency at a surface of the solid insulating layer, but only provides a more specific teaching of using an amorphous silicon layer as a water-repellant layer to thereby form a distribution of water repellency and hydrophilicity [0133]. Additionally, the foreign priority does not have support for the specific teachings of enhancing the liquid repellency either before or after patterning of the insulting layer. Also, there is no support for using ultraviolet ray or plasma irradiation to enhance the repellency.

Claims 105,107-115: The foreign priority document does not support enhancing either the lyophilicity or the wettability of the first electrode, or any sort of enhancing of the first electrode for that matter. Also, there is no support for the general enhancing of lyophilicity or wettability at a predetermined position because there is only support for providing an electric potential through the scanning lines, signal lines, and common lines to form opposite electric charges at the predetermined position and the peripheral regions of the predetermined position [0141]-[0149].

Claims 112,123: The foreign priority document does not provide any teaching of the repellency of the side-wall of the insulating layer relative to the upper surface of the insulating layer. In fact, there is no mention of anything about the side-wall of the insulating layer.

For at least these reasons, the foreign priority does not fully support the claims. Thus, the claims do not have the benefit of the foreign priority filing date, and Roitman and Ra are still considered prior art against the claims.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy Lin whose telephone number is (571)272-8902. The examiner can normally be reached on Monday thru Friday 8AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jimmy Lin/
Examiner, Art Unit 1792

/Timothy H Meeks/
Supervisory Patent Examiner, Art Unit
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